attached information, using calculations based upon approved negotiated contract prices and commonly accepted utilization parameters, shows a 70% differential below the wholesale cost component. This remains the case even when non-recurring charges are factored in. (Compare Ameritech's Base Line View with View #3. The Base Line View increases by \$0.000433131 if non-recurring costs are spread over 3 years and by \$0.000162424 if spread over 8 years.) When combined with the wholesale service discount, a CLEC has the opportunity to realize a savings of approximately 50% from retail rates. This clearly demonstrates that shared transport is a viable economic alternative should a CLEC choose this option.

Whether a CLEC chooses to take advantage of shared transport necessarily involves some degree of risk assessment. Congress has recognized that CLECs have the option of reselling ILEC services, using unbundled network elements, or constructing new networks, with increased risk associated with the respective options. This increased risk is offset by the prospect that the CLEC can lower its cost structure and increase its profit margin by controlling its network design and product offerings. The attached Concept Diagram illustrates this well recognized tradeoff.

AT&T is asking the Commission to disregard this tradeoff. It essentially seeks to have the Commission construe shared transport in a manner which gives it a TELRIC cost structure, but at a level of risk normally associated with resale of telecommunications services at wholesale rates. The attached information demonstrates that the opportunity to realize economic efficiencies associated with the use of unbundled interoffice transmission facilities exists if AT&T itself efficiently and prudently uses network elements to design its own network configurations.

Sincerely,

Attachments

cc: Mr. D. Ellen

Mr. K. Gude

Mr. J. Jennings

Ms. F. Setzer

Mr. D. Stockdale

Ms. L. Gelb

Mr. V. Gupta

Mr. E. Krachmer

Mr. D. Slotten

Mr. B. Cox (AT&T)

AMERITECH ANALYSIS OF AT&T'S UNBUNDLED TRANSPORT WITH SWITCHING SIDE BY SIDE COST COMPARISON SUMMARY* ILLINOIS

			AT&T's Analysis	Ameritech's <u>Analysis</u>
Base Line View Combination of direct and tandem trunks (80/20)		\$0.000776 /min.	\$0.001384 /min.	
View#1 Combination of dedicated transport & reciprocal compensation		\$0.02 20 92 /min.	\$\$.003866 /min.	
View #2 100% Tandem using dedicate	ed transport		\$0.041767 /min.	\$0.0031148 /min.
<u>View #3</u> Wholesale Service	Band A	Residence \$0.0057 /min.	<u>Business</u> \$0.0106 /min.	\$0.004442/min.(avg.)
AA HOTEVATE DELATE	B	\$0.0037 /min. \$0.0184 /min.	\$0.0219 /min.	φυ.υυ τττ 2/111111.(α ν g.)
	C	\$0.0261 /min.	\$0.0322 /min.	

^{*} Non-recurring charges not included in any analysis

BASE LINE VIEW*

NOTE: This analysis assumes the call uses CLEC unbundled interoffice transmission facilities between designated end offices. It assumes that 80% of the calls would be directly routed, end office to end office and that 20% of the calls would be routed through the tandem.

.0009515 .00046 (End Office to End Office Trunk Cost) x .8 (% of traffic direct routed)	\$.0007612 \$.000368
.0013684 .00083 (Tandem to End Office Trunk Cost) x .2 (% of traffic tandem routed) x 2 (# of trunks)	\$.0005472 \$.000332
.000378 (Unbundled Tandem Rate) x .2 (% of traffic tandem routed)	\$.0000756
Average Cost Per Minute of use for combined direct and tandem trunks	\$.001384 \$.000776

^{*} Non-recurring charges not included in any analysis

The Reason Ameritech's price of \$.001384 is different from AT&T's price of \$.000776

- 1. AT&T does not use actual contract prices. Rather, it attempt to unilaterally revise pricing that has already be established by the Illinois Commerce Commission.
- 2. The Contract Price for trunks between two end offices is \$169.91 (See Page 6) \$169.91 + 24 + 7,440 = \$.0009515. The so-called "Hatfield" price of .00046 is not in the contract.
- 3. The Contract Price for trunks between an end office and a tandem is \$244.35 (See Page 6) \$244.35 + 24 + 7,440 = \$.0013684. The so-called "Hatfield" price of .00083 is not in the contract

VIEW #1*

NOTE: This analysis assumes that all calls use CLEC trunks (unbundled interoffice transport + a trunk port) from the originating end office to a designated Ameritech tandem and transport & termination (Reciprocal Compensation) to complete the call from the tandem.

\$110.61 288 12:1 620 Dedicated Trunks = \$1603.85 + 192 (8:1 line/trunk ratio) + 400 (Avg. Min/Month)	\$.0006194 \$.020883
+ .00500 Transport & Termination = .000956 + .000193 + .00006 ^	\$.006209 \$.001209
Total cost per minute of use for trunks and Transport & Termination (excludes termination charges)	\$.006828 \$.022092

Trunking Component of the cost is \$.003866

The Reason Ameritech's price of \$.003866 is different from AT&T's price of \$.022092

- 1. The Contract Price for trunks from an end office to tandem office without a tandem port is \$110.61 (See Page 6) \$110.61 + 24 + 7.440 = \$.0006194.
- 2. Trunk ratio of 12:1, compared to 8:1
- 3. 620 minutes per line compared to 400
- 4. The Contract Price for Transport and Termination is \$.006209 (See Page 6).

 AT&T omitted the end office local termination charge of \$.00500. The local termination charge is different from the unbundled local switching usage charge of \$.002962. Thus, \$.002962 has been subtracted to create the estimate of the Trunking Component. \$.006828 \$.002962 = \$.003866.

^{*} Non-recurring charges not included in any analysis

VIEW #2*

NOTE: This analysis assumes that all calls use CLEC trunks (unbundled interoffice transport + 2 trunk ports) from the originating end office to the tandem and CLEC trunks from the tandem to the terminating end office.

\$244.35 288 12:1

620

\$.0027368

Dedicated Trunks =\$1603.85+192 (8:1 line/trunk ratio)x 2 (originating DS1 & Terminating DS1)+ 400 (Avg. Min/Month) = \$.041767 per equivalent minute of use

Plus Tandem switching charge of \$.000378 /min. = $\frac{$,000378}{}$

Total = \$.0031148

* Non-recurring charges not included in any analysis

The Reason Ameritech's price of \$.0031148 is different from AT&T's price of \$.041767

- 1. The Contract Price for trunks from an end office to tandem office without a tandem port is \$244.35 (See Page 6) \$244.35 + 24 + 7,440 = \$.0013684 which is used twice to represent two end office/tandem links.
- 2. Trunk ratio of 12:1, compared to 8:1
- 3. 620 minutes per line compared to 400
- 4. AT&T omitted the tandem switching rate element of \$.000378.

VIEW #3*

NOTE: This view uses Ameritech's proposal to utilize its existing common transport network as a service and compensate Ameritech at its wholesale rates.

Band	<u>Mileage</u>	Residence	Business
Α	0-8 Miles	\$.0057 per minute of use	\$.0106 per minute of use
В	8-15 Miles	\$.0184 per minute of use	\$.0219 per minute of use
С	>15 Miles	\$.0261 per minute of use	\$.0322 per minute of use
		Average Wholesale Minute of Use Cost is \$	3.010366

Average Wholesale Minute of Use Cost is \$.010366 Trunking Component of this Cost is \$.004442

The Reason Ameritech's price of \$.010366 is different from AT&T's tariff reference.

- 1. AT&T's analysis referenced Illinois rates which terminated on January 31st of this year.
- 2. The new rate structure is difficult to model because of time of day and volume discounts.
- 3. As a surrogate for the average rate created by the analysis in other views, Ameritech calculated the average revenue per minute by dividing the total revenues for usage based services by the total minutes of use and discounted that rate by 20% to approximate the wholesale discount in Illinois. This provided an average rate of \$0.010366 per minute.
- 4. To develop a comparison to the trunking calculations utilized in this analysis the Wholesale Minute of Use cost must be reduced to eliminate local switching costs which are not included in the other trunking comparisons. This is accomplished by subtracting two local switching usage charges from the wholesale rate. \$.010366 (2 x \$.002962) = \$0.004442.

^{*} Non-recurring charges not included in any analysis

CONTRACT PRICES IN ILLINOIS

END OFFICE to END OFFICE

Trunk Port	\$ 59.10
Cross-Connect	\$ 5.19
Interoffice Termination	\$16.29
DS1 Mileage (5 mile)	\$8.75
Interoffice Termination	\$16.29
Cross-Connect	\$5.19
Trunk Port	\$59.10
	169.91

END OFFICE to TANDEM

Trunk Port	\$59.10
Cross-Connect	\$5.19
Interoffice Termination	\$16.29
DS1 Mileage (5 mile)	\$8.75
Interoffice Termination	
Cross-Connect	\$5.19
<u> </u>	120.21
	<u>\$13.53</u>
	\$244.35

RECIPROCAL COMPENSATION

End Office Local Termination	\$0.005000 per minute
Tandem Switching	\$0.000956 per minute
Tandem Transport Termination	\$0.000193 per minute
Tandem Transport Facility Mileage	\$0,000060 per minute
(5 miles x \$0.000012) Total	\$0.006209 per minute

UNBUNDLED SWITCH USAGE

Local End Office	\$.002962
Tandem	\$.000378

ASSUMPTIONS AND RATES USED BY AMERITECH

• Rates are from signed and approved Ameritech-AT&T Illinois Agreement dated 1/14/97

Only one DS1 trunk port at \$59.10 required to terminate a DS1 in an End Office (AT&T incorrectly assumed 24)

• 20% of interoffice traffic routed through a tandem, 80% of interoffice traffic routed directly between end offices (Base Line View)

• 100% of traffic routes through the tandem for Views #1 & #2.

NOTE: Ameritech believes this is a poor assumption, but recalculated it for comparison purposes.

Average Mileage length of 5 miles used for all dedicated transport

• Line to trunk ratio of at least 12:1 would typically be used by the industry (both new and incumbent LECs)

Average Interswitch Usage (Local and Toll) 620 minutes per line

- Average monthly minutes per trunk is 7440 minutes (12 lines/trunk x 620 minutes/line)

 NOTE: AT&T's position that its customers would average only 400 minutes/line and that AT&T would design a network based on using only 1 trunk for 8 of these below average customer is counter-intuitive. A loading of 3200 minutes per trunk (8 lines/trunk x 400 minutes/line) per month would imply an average of only one 4.5 minute call per trunk per hour. Such loading is simply not realistic for any network provider. It would also appear to be inconsistent with AT&T's actual experience on its own network. Ameritech's assumption of 7440 minutes per month per trunk is conservative. The FCC required carriers to assume 9000 minutes per month in Local Transport Restructuring proceeding and during the early days of Long Distance competition AT&T claimed SPRINT was averaging 12,000 minutes of use on its ENFIA trunks.
- Reciprocal Compensation Charges and ULS usage charges are different and must be applied as appropriate (differences in View #1 vs. Base Line View and View #2).
- In multi-office wire centers (large wire centers with more than 1 switch) AT&T would need to obtain unbundled local switching elements in only one switch, not all switches)

• Non-recurring charges are also part of the same 1/14/97 Agreement

- AT&T would likely require only 26 line codes per switch to provide a robust line of services. Additional line class codes are
 available at AT&T's option at a non-recurring charge of \$232.00 each. Line class codes would be required regardless of the
 transport option utilized. AT&T apparently bases its line class code requirements on estimated line class code requirements for
 OS/DA routing associated with resold services not unbundled switching.
- Rates for View #3 should be averaged for comparison purposes (AT&T used rates which expired 1/31/97).

1401 H Street, N.W. Suite 1020 Washington, D.C. 20005 Office 202/326-3815



James K. Smith Director Federal Relations

April 10, 1997

RECEIVED

APR 1 0 1997,

Mr. William F. Caton, Acting Secretary Federal Communications Commission 1919 M Street, NW Room 222 Washington, DC 20554

FEDERAL COLOREGY:

RE:

Ex Parte Statement CC Docket No. 96-98

Dear Mr. Caton:

On April 10, 1997, pursuant to staff request, Dan Kocher and I had a telephone conversation with Jake Jennings and Kalpak Gude of the Policy and Program Planning Division concerning Ameritech's March 28, 1997 ex parte filed in this proceeding. The staff had clarifying questions concerning such issues as custom routing trunk port charge and whether the trunk port is part of unbundled local switching.

Sincerely,

cc: K. Gude

J. Jennings

NON-RECURRING CHARGES PER AT&T - AMERITECH 251 AGREEMENT

NON-RECURRING CHARGES ASSOCIATED WITH UNBUNDLED LOCAL TRANSPORT

Service Order Per DS1 \$98.73

Design and Central Office Connection \$636.43

Carrier Connection Charge per termination @ 588.93 (2 required) \$1177.86

Clear Channel Signaling per DS1 448.20

Total per DS1 \$ 2361.22

Administrative Charge Per Order \$408.05

Plus Admin. Charge\$2769.27

Note: Multiple DS1s can be placed on a single order

NON-RECURRING CHARGES ASSOCIATED WITH UNBUNDLED LOCAL SWITCHING

NOTE: These charges are applicable regardless of the transport alternative selected.

Trunk Port Connection Charge per DS1 port \$770.29 Initial \$29.16 Subsequent

Service Ordering Charge per occasion \$398.73 Initial \$17.37 Subsequent

NON-TRANSPORT RELATED NON-RECURRING CHARGES ASSOCIATED WITH UNBUNDLED LOCAL SWITCHING

Billing Development Charge per switch \$35,328.87

AMERITECH ASSUMPTION AT&T ASSUMPTION

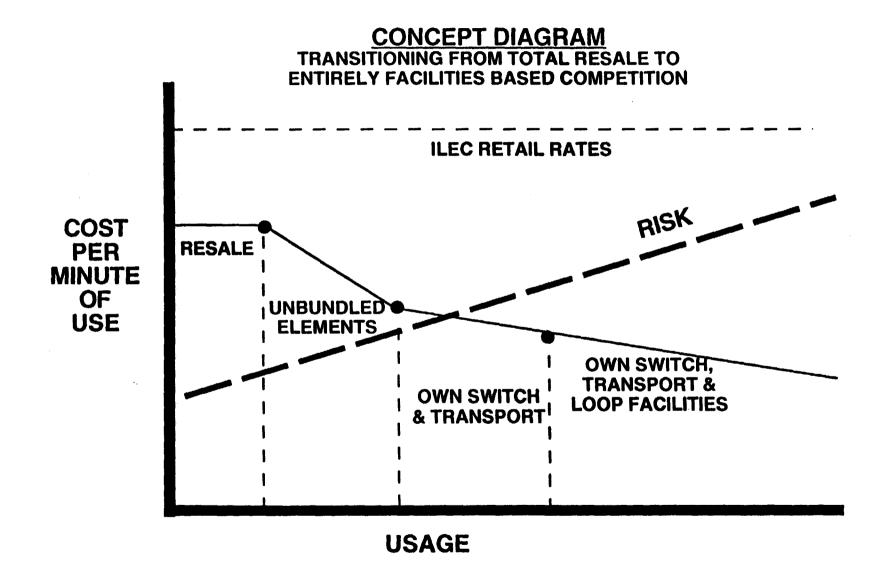
Custom Routing Charge \$232.24 (per Line Class Code per switch)

\$6046.04 (26 codes) \$23,224.00 (100 codes)

NON-RECURRING CHARGES ASSOCIATED WITH UNBUNDLED TANDEM SWITCHING

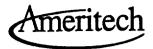
Service Order Charge \$398.73

Trunk Port Connection Charge per port \$770.29 Initial \$29.16 Subsequent Changes



1401 H Street, N.W. Suite 1020 Washington, D.C. 20005 Office 202/326-3815





James K. Smith
Director
Federal Relations

May 9, 1997

Mr. William F. Caton, Acting Secretary Federal Communications Commission 1919 M Street, NW Room 222 Washington, DC 20554 PRECEIVED

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RE:

Ex Parte Statement

CC Docket No. 96-98 (Shared Transport)

Dear Mr. Caton:

The attached Supplemental Rebuttal Testimony of David H. Gebhardt, presented on May 2, 1997 in Docket No. 96-0404 before the Illinois Commerce Commission, should be entered into the record of the above referenced docket.

Sincerely,

Attachment

- Q. TCG states that Ameritech Illinois is not providing nondiscriminatory access to its 911 and E911 services because the process used to load data into the 911 database has not been shown to be error free (Pelletier, p. 8). Do you agree?
- A. No. Ameritech Illinois recognizes the importance of maintaining as accurate a 911 database as possible. However, the accuracy of this database is dependent on the quality of information input into it. This information comes from a number of sources in addition to Ameritech Illinois. TCG, for example, is responsible for the accuracy of the input information for its customers. The 911 database is also dynamic and has constant churn. Notwithstanding this environment, Ameritech Illinois' objective is to maintain a 99% accuracy rate. Ameritech Illinois is currently meeting that objective in Illinois. In any event, Ameritech Illinois relies on the same database as TCG. To the extent there are errors, Ameritech Illinois and TCG are impacted equally and there is no discrimination.

Mr. Pelletier refers to a reloading of TCG's Illinois end-user data into Ameritech Illinois' 911 database.

Ameritech Illinois is not aware of any such reloading.

Summary of Checklist Compliance

- Q. Have you updated your previous schedule to reflect current conditions?
- A. Yes. My Schedule 1 show the quantities of various services and network elements which Ameritech Illinois is currently providing to the new LECs in its service territory as of May 1, 1997.

Conclusion

- Q. Does that conclude your testimony?
- A. Yes.

ILLINOIS CHECKLIST COMPLIANCE SUMMARY

	Checklist Item	Current Availability
i)	Interconnection	17,901 interconnected trunks as of 3/97
ii)	Access to Network Elements	See individual items
iii)	Poles, Ducts, Conduits and Rights of Way	900,000 feet of conduit and 106 poles are being used by other carriers as of 12/96
iv)	Unbundled Loops	13,931 sold as of 3/97
v)	Unbundled Transport	via Dedicated Access Services
vi)	Unbundled Local Switching	via AT&T agreement through Most Favored Nation clause
vii)	911, OS and DA	92 911 trunks, 12 operator trunks and 33 directory assistance trunks as of 3/97
viii)	White Pages Listings	3,965 as of 3/97 have been provided for the customers of facilities based carriers and resellers
ix)	Number Administration	247 CLEC NNXs have been assigned as of 3/97
x)	Signaling and Call Related Databases	29M queries in 1996 to LIDB and 800 databases
xi)	Number Portability	5,482 numbers have been ported as of 3/97
xii)	Local Dialing Parity	Over 10M inter-network calls completed during January 1997 with full dialing parity
xiii)	Reciprocal Compensation	Over 18M minutes completed for CLECs and over 55M completed to CLECs during 1/97
xiv)	Resale	30,796 lines had been ordered under a wholesale arrangement as of 4/97

Docket No. 96-0404

SUPPLEMENTAL REBUTTAL TESTIMONY OF DAVID H. GEBHARDT

Oualifications

- Q. Please state your name and business address.
- A. David H. Gebhardt, Ameritech Illinois, 225 West Randolph Street, Chicago, Illinois 60606.
- Q. Are you the same David H. Gebhardt who provided testimony previously in this proceeding?
- A. Yes.

Purpose Of Testimony

- Q. What is the purpose of your testimony?
- A. The purpose of my testimony is to respond to issues raised by Staff and other parties relative to unbundled local switching (ULS) and common transport; use of 611 dialing for repair calls; resale; directory issues; and 911 database issues. I will also update my schedule which shows the quantities of service and unbundled

network elements to which the CLECs are subscribing as of May 1, 1997.

ULS and Common Transport

- Q. AT&T, MCI, Comptel, and Staff continue to take the position that Ameritech Illinois' ULS offering is inadequate. Would you provide some general comments?
- Yes. At this point, the positions of the parties are A. clearly defined. There is a major definitional, technical and conceptual gap between Ameritech Illinois' position and that of the other parties relative to ULS and common transport. However, as the Company has been saying since the outset of these proceedings (and, indeed, since the Wholesale/Resale proceeding), the real objective underlying the IXCs' demand for common transport continues to relate to price and nothing else. I think that the IXCs have now made it clear that they have no real interest in unbundled elements. In fact, most of them concede, either directly or indirectly, that switching cannot be unbundled from transport in the arrangements they contemplate in a physical sense.

Instead, functionally, the CLECs are asking for precisely the same bundled services that are already

available today through Ameritech Illinois' wholesale and carrier access service offerings. The CLECs clearly expect Ameritech Illinois to originate, route and terminate their traffic, with no engineering or planning responsibility of any kind on their part. The CLECs also are unwilling to accept any financial or service risks. They simply want these functions performed for them by Ameritech Illinois in the same manner it does today for wholesale and carrier access services -- just at a lower "network element" price -- and they want to retain carrier access revenues for themselves. Fundamentally, this arrangement bears no relationship to the concept of unbundled network elements.

- Q. The parties continue to claim that Ameritech Illinois' position is precluded by either the FCC's order in Docket 96-98 or this Commission's order in the Wholesale/Resale Docket. Do you agree?
- A. No. I believe that neither this Commission, the FCC, nor the parties had any real understanding of the "platform" plan and unbundled local switching at the time those two orders were adopted. It has only been over the course of these proceedings and the proceedings before the FCC that the parties' positions have been clearly developed. For this reason, it is

critical that the Commission takes a new and hard look at this issue prior to deciding it. It has not already been decided, as many of the parties seem to suggest, and its resolution has serious ramifications for the integrity of this Commission's wholesale and carrier access pricing policies. The IXCs should not be permitted to end-run those policies in the manner they propose without serious consideration of the implications.

- Q. Are there specific issues that require further comment?
- A. Yes.
- Q. AT&T claims that "under Ameritech's proposal, no CLEC traffic would be carried over Ameritech's existing network; it would all be carried over new dedicated facilities" (p. 10); and, therefore, that "CLECs and their subscribers are denied the efficiencies inherent in Ameritech's existing interoffice transport routing" (Sherry, p. 8). This claim is echoed by Comptel (Gillan, p. 11). Are they correct?
- A. No, they are not. It is true that the IXCs using unbundled network elements would have to take an active role in designing and managing their own networks.

 However, that does not mean that they cannot use

Ameritech Illinois'. Ameritech Illinois offers to carry calls over its existing network as a wholesale service at a wholesale price.

- Q. Is it true that Ameritech Illinois' offering forces a CLEC to immediately establish a complete "overlay network" as Mr. Sherry claims?.
- No. First, a CLEC can initially establish a ULS Α. presence using wholesale usage services to carry most or all of its calls. As it builds customer base and call volumes, the CLEC can then collect data that will allow it to determine where and when it is feasible from both an economic and service quality standpoint to engineer its own trunk group to carry a particular subset of calls, while continuing to use wholesale usage services to carry other calls. We would expect CLECs obtaining ULS from Ameritech to quickly, if not immediately, establish its own dedicated trunk groups for two functions -- one for operator services and directory assistance calls, and one to carry interstate and intrastate toll calls originated on the ULS line ports to the IXC that the CLEC is either owned by or partners with.

Second, a CLEC can use the new Shared Company Transport options to quickly establish direct end-office-to-end-

office trunks as I described in my Supplemental Direct testimony. Although the CLEC would have to designate the trunk routes, the per-minute-of use pricing option provides significant capacity flexibility. Ameritech Illinois -- not the CLEC -- in that situation would be bearing most of the expense and risk associated with any "overlay network".

These two service options provide ample ability and incentive for an efficient network to be maintained. The specter of exhausted tandems and network blockage raised by Mr. Sherry on pages 12-14 of his testimony would only occur if AT&T were to deliberately implement a network design that is inefficient from both an economic and an engineering standpoint.

- Q. Comptel quotes the definition of the local switching capability network element in FCC rule 51.319(c)(l) and claims chat "[t]his all-encompassing definition would obviously include the basic routing instructions resident in the switch" (Gillan, p. 12). Do you agree?
- A. Absolutely not. The FCC's rule provides for an unbundled element which, in addition to the basic switching function, provides "all features the switch is capable of providing" (emphasis added). The switch and switch software provided by switch vendors do not

provide routing instructions. They provide the capability of acting on the routing instructions that are programmed by the operator of the switch. The routing instructions used by Ameritech Illinois to provide its services are the proprietary product of Ameritech Illinois' network engineers and administrators, and are not a feature of the switch. Ameritech Illinois' ULS network element offering includes the capability for the CLEC to engineer its own network routing tables and to have them programmed into the switch for the CLEC's use; or, alternatively, to make use of Ameritech Illinois' proprietary routing instructions by purchasing wholesale calling services to complete its calls.

Q. AT&T claims that Ameritech is inconsistent in its position that only "discrete" functionalities can be network elements, citing the inclusion of signaling transport in the unbundled signaling element and the incorporation of signaling in the ULS element as examples of network elements that are not "discrete" (Sherry, p. 5). Are his examples relevant to a determination whether "common transport", as defined by AT&T and others, can be classified as a network element?

- A. No. In both of the cases cited by Mr. Sherry, there are discrete, defined interfaces at which the element can be combined either with other unbundled network elements from Ameritech Illinois or with network elements provided by the requesting CLEC or a third party. Under AT&T's version of common transport, there is no interface to which CLEC or third party network elements can be connected. It is strictly a service available only with the ULS element provided by Ameritech.
- Q. Is Staff correct in stating that "[t]here is no technical constraint that would prevent Ameritech from providing access to common transport as a network element"?
- A. Absolutely not. As I stated above, common transport as defined by AT&T, MCI, and Comptel cannot be provided as a stand-alone unbundled network element separate from any other element or service provided by Ameritech Illinois.
- Q. Dr. Ankum claims that common transport service should be the same arrangement Ameritech Illinois offers to IXCs in its access tariff (Ankum, p. 7). Do you agree?